Surface Science 246 (1991) 478–481
North-Holland

Author index

Abe, T., S.S. Brenner and W.A. Soffa, Decomposition of a Cu–Ni–Cr ternary alloy 246 (1991) 266
Abe, T., Statistical thermodynamics study of the concentration fluctuations above the critical temperature 246 (1991) 315
Al-Kassab, T., see Liu 246 (1991) 329
Andrén, H.-O., see Hu 246 (1991) 195
Andrén, H.-O., S. Karagöz, C. Guangjun, L. Lundin and H. Fischmeister, Carbide precipitation in chromium steels 246 (1991) 246
Andrén, H.-O., see Lindahl 246 (1991) 319
Andrén, H.-O., see Rolander 246 (1991) 390
Auger, P., see Danoix 246 (1991) 260

Bakhtizin, R.Z. and S.S. Ghots, Determination of activation energies using field emission fluctuations from semiconductors 246 (1991) 60
Bakker, J.W., see Wolf 246 (1991) 135
Bakker, J.W., see Wolf 246 (1991) 420
Biernat, T., Ch. Kleint and R. Męclewski, Field emission current fluctuations due to lithium adsorbed on the W(111) region 246 (1991) 54
Blavette, D., see Buchon 246 (1991) 218
Blavette, D., see Danoix 246 (1991) 260
Block, J.H., H.J. Kreuzer and L.C. Wang, Electrostatic field effects in surface reactivity: adsorption, dissociation and catalytic reaction of nitric oxide 246 (1991) 125
Block, J.H., see Drachsel 246 (1991) 141
Block, J.H., see Dirks 246 (1991) 150
Bostel, A., see Danoix 246 (1991) 260
Bozdech, G., see Melmed 246 (1991) 173
Bozdech, G., see Ernst 246 (1991) 183
Bradley, F.G., see Kelly 246 (1991) 377
Brenner, S.S., J. Kowalik and Hua Ming-Jian, FIM/atom probe analysis of a heat treated 7150 aluminum alloy 246 (1991) 210
Brenner, S.S., see Abe 246 (1991) 266
Brown, J.E. and G.D.W. Smith, Atom probe studies of spinodal processes in duplex stainless steels and single- and dual-phase Fe–Cr–Ni alloys 246 (1991) 285
Buchon, A., A. Menand and D. Blavette, Phase composition and grain-boundary segregation in a nickel base superalloy: a preliminary TEM-APFIM investigation 246 (1991) 218

Camus, P.P., see Melmed 246 (1991) 173
Camus, P.P. and A.J. Melmed, Performance of a reflectron energy compensating mirror 246 (1991) 415
Cerezo, A., see Sha 246 (1991) 278
Cerezo, A. and M.K. Miller, Einzel lenses in atom probe designs 246 (1991) 450
Cerezo, A., see Sha 246 (1991) 457
Chabala, J.M., see Levi-Setti 246 (1991) 94
Chambers, R.S., Determination of cluster spacings in the FIM: iridium dimers on W(110) 246 (1991) 25
Chen, C.-L., see Tsong 246 (1991) 13
Chen, G.H., see Gao 246 (1991) 205
Chung, M., P.H. Cutler, J. He and N.M. Miskovsky, A first-order electrohydrodynamic treatment of the shape and instability of liquid metal ion sources 246 (1991) 118
Chung, M., see He 246 (1991) 348
Cutler, P.H., see Chung 246 (1991) 118
Cutler, P.H., see He 246 (1991) 348

Danoix, F., P. Auger, A. Bostel and D. Blavette, Atom probe characterization of isotropic spinodal decompositions: spatial convolutions and related bias 246 (1991) 260
Dirks, J., W. Drachsel and J.H. Block, Time-correlated ion formation in the field desorption of hydrogen 246 (1991) 150
Drachsel, W. and J.H. Block, Isotopic effects in field desorption of hydrogen from tungsten 246 (1991) 141
Drachsel, W., see Dirks 246 (1991) 150

Ehrlich, G., Direct observations of the surface diffusion of atoms and clusters 246 (1991) 1
Ehrlich, G., see Wang 246 (1991) 37
Ehrlich, G., see Lovisa 246 (1991) 43
Ernst, N., see Melmed 246 (1991) 173
Ernst, N., W.A. Schmidt, G. Bozdech, M. Naschitzki and A.J. Melmed, Electronic properties of high-T_c superconductors below and above the Fermi energy 246 (1991) 183

Elsevier Science Publishers B.V. (North-Holland)

Feuchtwang, T.E., see He 246 (1991) 348
Fischmeister, H., see Andrén 246 (1991) 246
Forbes, R.G. and N.N. Ljepojevic, Calculation of the shape of the liquid cone in a liquid-metal ion source 246 (1991) 113
Forbes, R.G., Further comments on field adsorption 246 (1991) 386
Frommeyer, G., see Liu 246 (1991) 272
Fursey, G.N., A.V. Kocheryzhenkov and V.I. Maslov, The quantity of elementary acts and the statistics of field emission 246 (1991) 365

Gao, Q.J., A study of alloying on metal planes 246 (1991) 50
Gao, Q.J., Z.X. Zhang, M. Lu, Y. Wang, P. Wang, Z.Y. Huang, Z.D. Lin, F.Q. Zhang, W.J. Zhang, Y.F. Zhang, G.H. Chen and X.L. Jiang, Direct observation of atomic images of ultrathin diamond and diamond-like films 246 (1991) 205
Geh, S., see Wu 246 (1991) 468
Ghots, S.S., see Bakhtizin 246 (1991) 60
Girod, C., see Levi-Setti 246 (1991) 94
Gong, Yun-Ming and Hai-Shan Zeng, Adsorption and desorption of oxygen on the W(100) plane 246 (1991) 169
Gregory, D.S., see Wu 246 (1991) 468
Guangjun, C., see Andrén 246 (1991) 246

Haasen, P., see Liu 246 (1991) 329
Hallégot, P., see Levi-Setti 246 (1991) 94
Hasegawa, Y., see Hashizume 246 (1991) 189
Hashizume, T., Y. Hasegawa, I. Sumita and T. Sakurai, FI-STM study of alkali metal adsorption on Si surfaces 246 (1991) 189
Hayashi, H., see Okuyama 246 (1991) 408
He, J., see Chung 246 (1991) 118
He, J., P.H. Cutler, N.M. Miskovsky, T.E. Feuchtwang, T.E. Sullivan and M. Chung, Derivation of the image interaction for non-planar pointed emitter geometries: application to field emission I–V characteristics 246 (1991) 348
Hetherington, M.G., J.M. Hyde, M.K. Miller and G.D.W. Smith, Measurement of the amplitude of a spinodal 246 (1991) 304
Hetherington, M.G., see Miller 246 (1991) 442
Howell, B.D., see Kelly 246 (1991) 377
Hren, J.J., see Jayaram 246 (1991) 323
Hu, B.Y., see Ren 246 (1991) 177
Hu, B.Y., see Liu 246 (1991) 462
Hu, B.Y., see Ren 246 (1991) 465
Hu, Q.-H., A. Kvist and H.-O. Andrén, Atom probe analysis of the silver/gallium arsenide contact 246 (1991) 195
Hua Ming-Jian, see Brenner 246 (1991) 210
Huang, Z.Y., see Gao 246 (1991) 205
Hyde, J.M., see Hetherington 246 (1991) 304

Inoue, T. and M. Nakada, A novel zirconiating technique for high brightness Zr/W emitter 246 (1991) 87
Iwai, H., see Okuyama 246 (1991) 408

Jayaram, R., J.J. Hren and M.K. Miller, APFIM/TEM characterization of solute partitioning in a model Ni–Mo–Al–Ta superalloy 246 (1991) 323
Jiang, X.L., see Gao 246 (1991) 205
Johnston, R., The physics of field emission in the context of vacuum microelectronics 246 (1991) 64

Karagöz, S., see Andrén 246 (1991) 246
Kellogg, G.L., Temperature dependence of surface self-diffusion on Pt(001) 246 (1991) 31
Kelly, T.F., N.A. Zreiba, B.D. Howell and F.G. Bradley, Energy deposition and heat transfer in a pulse-heated field emission tip at high repetition rates 246 (1991) 377
Kelly, T.F., D.C. Mancini, J.J. McCarthy and N.A. Zreiba, Proposed configurations for a high-repetition-rate position-sensitive atom probe 246 (1991) 396
Kenik, E.A., see Russell 246 (1991) 292
Kinkus, T.J., see Olson 246 (1991) 238
Kleint, Ch., see Biernat 246 (1991) 54
Kocheryzhenkov, A.V., see Fursey 246 (1991) 365
Kolster, B.H., see Swens 246 (1991) 252
Kowalik, J., see Brenner 246 (1991) 210
Koyama, H., see Nishikawa 246 (1991) 201
Kreuss, M., see Liu 246 (1991) 272
Kreuzer, H.J., see Block 246 (1991) 125
Kreuzer, H.J., Physics and chemistry in high electric fields 246 (1991) 336
Kvist, A., see Hu 246 (1991) 195

Levi-Setti, R., P. Hallégot, C. Girod, J.M. Chabala, J. Li, A. Sodonis and W. Wolbach, Critical issues in the application of a gallium probe to high resolution secondary ion imaging 246 (1991) 94
Li, J., see Levi-Setti 246 (1991) 94
Lin, Z.D., see Gao 246 (1991) 205
Lindahl, P., U. Rolander and H.-O. Andrén, Atom-probe analysis of a commercial cermet 246 (1991) 319
Lisovskii, I.P., see Litovchenko 246 (1991) 69
Litovchenko, V.G., I.P. Lisovskii and V.G. Popov, Internal field emission of microelectronic MIS structures 246 (1991) 69

Liu, J., C.-W. Wu and T.T. Tsong, Measurement of the atomic site specific binding energy of surface atoms of metals and alloys 246 (1991) 157
Liu, W., see Ren 246 (1991) 177
Liu, W., D.M. Ren and B.Y. Hu, Direct determination of microstructures by IAP FIM. I. General idea and scheme 246 (1991) 462
Liu, W., see Ren 246 (1991) 465
Liu Yun-Peng and Zheng Mao-Sheng, The boundary element algorithm for the electric field of the Spindt device 246 (1991) 75
Liu, Z.G., G. Frommeyer and M. Kreuss, Atom probe FIM investigations on the intermetallic NiAl phase with B2 superlattice structure 246 (1991) 272
Liu, Z.G., T. Al-Kassab and P. Haasen, The phase separation in a NiBe alloy, as studied by atom probe field ion microscopy 246 (1991) 329
Ljepojevic, N.N., see Forbes 246 (1991) 113
Lovisa, M.F. and G. Ehrlich, Quantitative determinations of the temperature dependence of diffusion phenomena in the FIM 246 (1991) 43
Lu, M., see Gao 246 (1991) 205
Lundin, L., see Andrén 246 (1991) 246

Mancini, D.C., see Kelly 246 (1991) 396
Maslov, V.I., see Fursey 246 (1991) 365
McCarthy, J.J., see Kelly 246 (1991) 396
Męclewski, R., see Biernat 246 (1991) 54
Melmed, A.J., P.P. Camus, N. Ernst, W.A. Schmidt, G. Bozdech and M. Naschitzki, A diffusion phenomenon in Y–Ba–Cu–O superconductors 246 (1991) 173
Melmed, A.J., see Ernst 246 (1991) 183
Melmed, A.J., see Camus 246 (1991) 415
Menand, A., see Buchon 246 (1991) 218
Miller, M.K., see Russell 246 (1991) 292
Miller, M.K. and K.F. Russell, In-situ phase transformation in the field ion microscope 246 (1991) 299
Miller, M.K., see Hetherington 246 (1991) 304
Miller, M.K., see Jayaram 246 (1991) 323
Miller, M.K., Concepts in atom probe designs 246 (1991) 428
Miller, M.K., Computerized field evaporation microscopy 246 (1991) 434
Miller, M.K. and M.G. Hetherington, Local magnification effects in the atom probe 246 (1991) 442
Miller, M.K., see Cerezo 246 (1991) 450
Miskovsky, N.M., see Chung 246 (1991) 118
Miskovsky, N.M., see He 246 (1991) 348
Mitterauer, J., Miniaturized liquid metal ion sources (MILMIS) 246 (1991) 107
Montgomery, J.S., see Olson 246 (1991) 238
Morikawa, H., see Saga 246 (1991) 231
Mousa, M.S., Effect of an internally conductive coating on the electron emission from glass tips 246 (1991) 79

Nakada, M., see Inoue 246 (1991) 87
Naschitzki, M., see Melmed 246 (1991) 173
Naschitzki, M., see Ernst 246 (1991) 183
Nieuwenhuys, B.E., see Wolf 246 (1991) 135
Nieuwenhuys, B.E., see Wolf 246 (1991) 420
Nishikawa, O., H. Koyama and M. Tomitori, Work function, field emitted electron energy spectrum and surface composition of silicon covered molybdenum 246 (1991) 201

Okuyama, F., H. Hayashi and H. Iwai, Diagnosis of radio-frequency silane and silane–nitrogen plasmas based on field ionization mass spectrometry 246 (1991) 408
Olson, G.B., T.J. Kinkus and J.S. Montgomery, APFIM study of multicomponent M_2C carbide precipitation in AF1410 steel 246 (1991) 238

Panitz, J.A. and A. Stintz, Imaging atom-probe analysis of a vitreous ice interface 246 (1991) 163
Pickering, H.W., see Wu 246 (1991) 468
Popov, V.G., see Litovchenko 246 (1991) 69
Ptitsin, V.E., Instability of thermal field electron emission 246 (1991) 373

Qin, J.H., see Ren 246 (1991) 177

Ren, D.M., W. Liu, B.Y. Hu, G.E. Zhou and J.H. Qin, A FIM investigation of high temperature superconducting $Bi_2(Sr, Ca)_3Cu_2O_y$ 246 (1991) 177
Ren, D.M., see Liu 246 (1991) 462
Ren, D.M., W. Liu and B.Y. Hu, Direct determination of microstructures by IAP FIM. II. W bcc lattice determined by a manual method 246 (1991) 465
Rolander, U., see Lindahl 246 (1991) 319
Rolander, U. and H.-O. Andrén, Design of an atom-probe high voltage pulser 246 (1991) 390
Russell, K.F., E.A. Kenik and M.K. Miller, Characterization of the Tishomingo meteorite 246 (1991) 292
Russell, K.F., see Miller 246 (1991) 299

Saga, M., R. Uemori, M. Tanino and H. Morikawa, A combined AP-FIM/HREM approach to the characterization of microstructure in a Mn-added TiAl intermetallic compound 246 (1991) 231

Sakurai, T., see Hashizume 246 (1991) 189
Sakurai, T., see Wu 246 (1991) 468
Schmidt, W.A., see Melmed 246 (1991) 173
Schmidt, W.A., see Ernst 246 (1991) 183
Sha, W., A. Cerezo and G.D.W. Smith, Atom probe field-ion microscopy study of ageing behaviour of a Co-free maraging steel 246 (1991) 278
Sha, W., A. Cerezo and G.D.W. Smith, Some aspects of the measurement of precipitate size in the field-ion microscope 246 (1991) 457
Smith, G.D.W., see Sha 246 (1991) 278
Smith, G.D.W., see Brown 246 (1991) 285
Smith, G.D.W., see Hetherington 246 (1991) 304
Smith, G.D.W., see Sha 246 (1991) 457
Sodonis, A., see Levi-Setti 246 (1991) 94
Soffa, W.A., see Abe 246 (1991) 266
Stiller, K., Investigations of grain boundary microchemistry in nickel base superalloys 246 (1991) 225
Stintz, A., see Panitz 246 (1991) 163
Sullivan, T.E., see He 246 (1991) 348
Sumita, I., see Hashizume 246 (1991) 189
Swens, J.J. and B.H. Kolster, σ-Phase precipitation in a duplex stainless steel: an APFIM investigation 246 (1991) 252

Tanino, M., see Saga 246 (1991) 231
Tomitori, M., see Nishikawa 246 (1991) 201
Tsong, T.T. and C.-L. Chen, Diffusion of Ir-dimers on Ir(110) surfaces by atomic-exchange and atomic-hopping mechanisms 246 (1991) 13
Tsong, T.T., see Liu 246 (1991) 157

Uemori, R., see Saga 246 (1991) 231

Wang, L.C., see Block 246 (1991) 125
Wang, P., see Gao 246 (1991) 205
Wang, S.C. and G. Ehrlich, Determination of atomic binding sites on the fcc (111) plane 246 (1991) 37
Wang, Y., see Gao 246 (1991) 205
Wolbach, W., see Levi-Setti 246 (1991) 94
Wolf, R.M., J.W. Bakker and B.E. Nieuwenhuys, Dissociation of nitric oxide and reaction with hydrogen on Rh(111) and various stepped Rh(111) surfaces 246 (1991) 135
Wolf, R.M., J.W. Bakker and B.E. Nieuwenhuys, Design and performance of a scanning probe-hole field emission microscope 246 (1991) 420
Wu, C.-W., see Liu 246 (1991) 157
Wu, Y.C., H.W. Pickering, D.S. Gregory, S. Geh and T. Sakurai, Real time scanning tunneling microscopy of anodic dissolution of copper 246 (1991) 468

Zeng, Hai-Shan, see Gong 246 (1991) 169
Zhang, F.Q., see Gao 246 (1991) 205
Zhang, W.J., see Gao 246 (1991) 205
Zhang, Y.F., see Gao 246 (1991) 205
Zhang, Z.X., see Gao 246 (1991) 205
Zheng Mao-Sheng, see Liu Yun-Peng 246 (1991) 75
Zhou, G.E., see Ren 246 (1991) 177
Zreiba, N.A., see Kelly 246 (1991) 377
Zreiba, N.A., see Kelly 246 (1991) 396

Surface Science 246 (1991) 482–488
North-Holland

Subject index

Alkali metals

T. Biernat, Ch. Kleint and R. Męclewski, Field emission current fluctuations due to lithium adsorbed on the W(111) region 246 (1991) 54

T. Hashizume, Y. Hasegawa, I. Sumita and T. Sakurai, FI-STM study of alkali metal adsorption on Si surfaces 246 (1991) 189

Alloys

Q.J. Gao, A study of alloying on metal planes 246 (1991) 50

R. Levi-Setti, P. Hallégot, C. Girod, J.M. Chabala, J. Li, A. Sodonis and W. Wolbach, Critical issues in the application of a gallium probe to high resolution secondary ion imaging 246 (1991) 94

J. Liu, C.-W. Wu and T.T. Tsong, Measurement of the atomic site specific binding energy of surface atoms of metals and alloys 246 (1991) 157

S.S. Brenner, J. Kowalik and Hua Ming-Jian, FIM/atom probe analysis of a heat treated 7150 aluminum alloy 246 (1991) 210

A. Buchon, A. Menand and D. Blavette, Phase composition and grain-boundary segregation in a nickel base superalloy: a preliminary TEM-APFIM investigation 246 (1991) 218

K. Stiller, Investigations of grain boundary microchemistry in nickel base superalloys 246 (1991) 225

M. Saga, R. Uemori, M. Tanino and H. Morikawa, A combined AP-FIM/HREM approach to the characterization of microstructure in a Mn-added TiAl intermetallic compound 246 (1991) 231

T. Abe, S.S. Brenner and W.A. Soffa, Decomposition of a Cu–Ni–Cr ternary alloy 246 (1991) 266

Z.G. Liu, G. Frommeyer and M. Kreuss, Atom probe FIM investigations on the intermetallic NiAl phase with B2 superlattice structure 246 (1991) 272

J.E. Brown and G.D.W. Smith, Atom probe studies of spinodal processes in duplex stainless steels and single- and dual-phase Fe–Cr–Ni alloys 246 (1991) 285

M.G. Hetherington, J.M. Hyde, M.K. Miller and G.D.W. Smith, Measurement of the amplitude of a spinodal 246 (1991) 304

T. Abe, Statistical thermodynamics study of the concentration fluctuations above the critical temperature 246 (1991) 315

R. Jayaram, J.J. Hren and M.K. Miller, APFIM/TEM characterization of solute partitioning in a model Ni–Mo–Al–Ta superalloy 246 (1991) 323

Z.G. Liu, T. Al-Kassab and P. Haasen, The phase separation in a NiBe alloy, as studied by atom probe field ion microscopy 246 (1991) 329

M.K. Miller, Computerized field evaporation microscopy 246 (1991) 434

M.K. Miller and M.G. Hetherington, Local magnification effects in the atom probe 246 (1991) 442

W. Sha, A. Cerezo and G.D.W. Smith, Some aspects of the measurement of precipitate size in the field-ion microscope 246 (1991) 457

Carbides

P. Lindahl, U. Rolander and H.-O. Andrén, Atom-probe analysis of a commercial cermet 246 (1991) 319

Carbon

Q.J. Gao, Z.X. Zhang, M. Lu, Y. Wang, P. Wang, Z.Y. Huang, Z.D. Lin, F.Q. Zhang, W.J. Zhang, Y.F. Zhang, G.H. Chen and X.L. Jiang, Direct observation of atomic images of ultrathin diamond and diamond-like films 246 (1991) 205

Cobalt

J. Liu, C.-W. Wu and T.T. Tsong, Measurement of the atomic site specific binding energy of surface atoms of metals and alloys 246 (1991) 157

Contacts

Q.-H. Hu, A. Kvist and H.-O. Andrén, Atom probe analysis of the silver/gallium arsenide contact 246 (1991) 195

Elsevier Science Publishers B.V. (North-Holland)

Copper

Y.C. Wu, H.W. Pickering, D.S. Gregory, S. Geh and T. Sakurai, Real time scanning tunneling microscopy of anodic dissolution of copper 246 (1991) 468

Electron microscopy

A. Buchon, A. Menand and D. Blavette, Phase composition and grain-boundary segregation in a nickel base superalloy: a preliminary TEM-APFIM investigation 246 (1991) 218

M. Saga, R. Uemori, M. Tanino and H. Morikawa, A combined AP-FIM/HREM approach to the characterization of microstructure in a Mn-added TiAl intermetallic compound 246 (1991) 231

H.-O. Andrén, S. Karagöz, C. Guangjun, L. Lundin and H. Fischmeister, Carbide precipitation in chromium steels 246 (1991) 246

J.J. Swens and B.H. Kolster, σ-Phase precipitation in a duplex stainless steel: an APFIM investigation 246 (1991) 252

K.F. Russell, E.A. Kenik and M.K. Miller, Characterization of the Tishomingo meteorite 246 (1991) 292

R. Jayaram, J.J. Hren and M.K. Miller, APFIM/TEM characterization of solute partitioning in a model Ni–Mo–Al–Ta superalloy 246 (1991) 323

Field desorption

J.H. Block, H.J. Kreuzer and L.C. Wang, Electrostatic field effects in surface reactivity: adsorption, dissociation and catalytic reaction of nitric oxide 246 (1991) 125

W. Drachsel and J.H. Block, Isotopic effects in field desorption of hydrogen from tungsten 246 (1991) 141

J. Dirks, W. Drachsel and J.H. Block, Time-correlated ion formation in the field desorption of hydrogen 246 (1991) 150

H.J. Kreuzer, Physics and chemistry in high electric fields 246 (1991) 336

Field emission, see also Field emission microscopy, Field ion microscopy

T. Biernat, Ch. Kleint and R. Męclewski, Field emission current fluctuations due to lithium adsorbed on the W(111) region 246 (1991) 54

R.Z. Bakhtizin and S.S. Ghots, Determination of activation energies using field emission fluctuations from semiconductors 246 (1991) 60

R. Johnston, The physics of field emission in the context of vacuum microelectronics 246 (1991) 64

V.G. Litovchenko, I.P. Lisovskii and V.G. Popov, Internal field emission of microelectronic MIS structures 246 (1991) 69

Liu Yun-Peng and Zheng Mao-Sheng, The boundary element algorithm for the electric field of the Spindt device 246 (1991) 75

M.S. Mousa, Effect of an internally conductive coating on the electron emission from glass tips 246 (1991) 79

J.A. Panitz and A. Stintz, Imaging atom-probe analysis of a vitreous ice interface 246 (1991) 163

J. He, P.H. Cutler, N.M. Miskovsky, T.E. Feuchtwang, T.E. Sullivan and M. Chung, Derivation of the image interaction for non-planar pointed emitter geometries: application to field emission I–V characteristics 246 (1991) 348

G.N. Fursey, A.V. Kocheryzhenkov and V.I. Maslov, The quantity of elementary acts and the statistics of field emission 246 (1991) 365

V.E. Ptitsin, Instability of thermal field electron emission 246 (1991) 373

R.G. Forbes, Further comments on field adsorption 246 (1991) 386

Field emission microscopy, see also Field emission

T. Inoue and M. Nakada, A novel zirconiating technique for high brightness Zr/W emitter 246 (1991) 87

R.M. Wolf, J.W. Bakker and B.E. Nieuwenhuys, Dissociation of nitric oxide and reaction with hydrogen on Rh(111) and various stepped Rh(111) surfaces 246 (1991) 135

Yun-Ming Gong and Hai-Shan Zeng, Adsorption and desorption of oxygen on the W(100) plane 246 (1991) 169

N. Ernst, W.A. Schmidt, G. Bozdech, M. Naschitzki and A.J. Melmed, Electronic properties of high-T_c superconductors below and above the Fermi energy 246 (1991) 183

O. Nishikawa, H. Koyama and M. Tomitori, Work function, field emitted elec-

tron energy spectrum and surface composition of silicon covered molybdenum 246 (1991) 201
R. Jayaram, J.J. Hren and M.K. Miller, APFIM/TEM characterization of solute partitioning in a model Ni–Mo–Al–Ta superalloy 246 (1991) 323
R.M. Wolf, J.W. Bakker and B.E. Nieuwenhuys, Design and performance of a scanning probe-hole field emission microscope 246 (1991) 420

Field evaporation, see also Field emission

Q.J. Gao, A study of alloying on metal planes 246 (1991) 50
J. Mitterauer, Miniaturized liquid metal ion sources (MILMIS) 246 (1991) 107
R.G. Forbes and N.N. Ljepojevic, Calculation of the shape of the liquid cone in a liquid-metal ion source 246 (1991) 113
M.S. Chung, P.H. Cutler, J. He and N.M. Miskovsky, A first-order electrohydrodynamic treatment of the shape and instability of liquid metal ion sources 246 (1991) 118
J. Liu, C.-W. Wu and T.T. Tsong, Measurement of the atomic site specific binding energy of surface atoms of metals and alloys 246 (1991) 157
Z.G. Liu, G. Frommeyer and M. Kreuss, Atom probe FIM investigations on the intermetallic NiAl phase with B2 superlattice structure 246 (1991) 272
H.J. Kreuzer, Physics and chemistry in high electric fields 246 (1991) 336
T.F. Kelly, N.A. Zreiba, B.D. Howell and F.G. Bradley, Energy deposition and heat transfer in a pulse-heated field emission tip at high repetition rates 246 (1991) 377
U. Rolander and H.-O. Andrén, Design of an atom-probe high voltage pulser 246 (1991) 390
P.P. Camus and A.J. Melmed, Performance of a reflectron energy compensating mirror 246 (1991) 415
M.K. Miller, Computerized field evaporation microscopy 246 (1991) 434
M.K. Miller and M.G. Hetherington, Local magnification effects in the atom probe 246 (1991) 442
W. Liu, D.M. Ren and B.Y. Hu, Direct determination of microstructures by IAP FIM. I. General idea and scheme 246 (1991) 462

Field ion microscopy, see also Field emission

T.T. Tsong and C.-L. Chen, Diffusion of Ir-dimers on Ir(110) surfaces by atomic-exchange and atomic-hopping mechanisms 246 (1991) 13
R.S. Chambers, Determination of cluster spacings in the FIM: iridium dimers on W(110) 246 (1991) 25
G.L. Kellogg, Temperature dependence of surface self-diffusion on Pt(001) 246 (1991) 31
S.C. Wang and G. Ehrlich, Determination of atomic binding sites on the fcc (111) plane 246 (1991) 37
Q.J. Gao, A study of alloying on metal planes 246 (1991) 50
A.J. Melmed, P.P. Camus, N. Ernst, W.A. Schmidt, G. Bozdech and M. Naschitzki, A diffusion phenomenon in Y–Ba–Cu–O superconductors 246 (1991) 173
D.M. Ren, W. Liu, B.Y. Hu, G.E. Zhou and J.H. Qin, A FIM investigation of high temperature superconducting $Bi_2(Sr, Ca)_3Cu_2O_y$ 246 (1991) 177
N. Ernst, W.A. Schmidt, G. Bozdech, M. Naschitzki and A.J. Melmed, Electronic properties of high-T_c superconductors below and above the Fermi energy 246 (1991) 183
Q.-H. Hu, A. Kvist and H.-O. Andrén, Atom probe analysis of the silver/gallium arsenide contact 246 (1991) 195
Q.J. Gao, Z.X. Zhang, M. Lu, Y. Wang, P. Wang, Z.Y. Huang, Z.D. Lin, F.Q. Zhang, W.J. Zhang, Y.F. Zhang, G.H. Chen and X.L. Jiang, Direct observation of atomic images of ultrathin diamond and diamond-like films 246 (1991) 205
S.S. Brenner, J. Kowalik and Hua Ming-Jian, FIM/atom probe analysis of a heat treated 7150 aluminum alloy 246 (1991) 210
A. Buchon, A. Menand and D. Blavette, Phase composition and grain-boundary segregation in a nickel base superalloy: a preliminary TEM-APFIM investigation 246 (1991) 218
K. Stiller, Investigations of grain boundary microchemistry in nickel base superalloys 246 (1991) 225
M. Saga, R. Uemori, M. Tanino and H. Morikawa, A combined AP-FIM/HREM approach to the characterization of microstructure in a Mn-added TiAl intermetallic compound 246 (1991) 231
G.B. Olson, T.J. Kinkus and J.S. Montgomery, APFIM study of multicom-

ponent M_2C carbide precipitation in AF1410 steel 246 (1991) 238
H.-O. Andrén, S. Karagöz, C. Guangjun, L. Lundin and H. Fischmeister, Carbide precipitation in chromium steels 246 (1991) 246
J.J. Swens and B.H. Kolster, σ-Phase precipitation in a duplex stainless steel: an APFIM investigation 246 (1991) 252
T. Abe, S.S. Brenner and W.A. Soffa, Decomposition of a Cu–Ni–Cr ternary alloy 246 (1991) 266
Z.G. Liu, G. Frommeyer and M. Kreuss, Atom probe FIM investigations on the intermetallic NiAl phase with B2 superlattice structure 246 (1991) 272
W. Sha, A. Cerezo and G.D.W. Smith, Atom probe field-ion microscopy study of ageing behaviour of a Co-free maraging steel 246 (1991) 278
J.E. Brown and G.D.W. Smith, Atom probe studies of spinodal processes in duplex stainless steels and single- and dual-phase Fe–Cr–Ni alloys 246 (1991) 285
K.F. Russell, E.A. Kenik and M.K. Miller, Characterization of the Tishomingo meteorite 246 (1991) 292
M.K. Miller and K.F. Russell, In-situ phase transformation in the field ion microscope 246 (1991) 299
T. Abe, Statistical thermodynamics study of the concentration fluctuations above the critical temperature 246 (1991) 315
P. Lindahl, U. Rolander and H.-O. Andrén, Atom-probe analysis of a commercial cermet 246 (1991) 319
Z.G. Liu, T. Al-Kassab and P. Haasen, The phase separation in a NiBe alloy, as studied by atom probe field ion microscopy 246 (1991) 329
T.F. Kelly, D.C. Mancini, J.J. McCarthy and N.A. Zreiba, Proposed configurations for a high-repetition-rate position-sensitive atom probe 246 (1991) 396
M.K. Miller, Concepts in atom probe designs 246 (1991) 428
M.K. Miller and M.G. Hetherington, Local magnification effects in the atom probe 246 (1991) 442
A. Cerezo and M.K. Miller, Einzel lenses in atom probe designs 246 (1991) 450
W. Sha, A. Cerezo and G.D.W. Smith, Some aspects of the measurement of precipitate size in the field-ion microscope 246 (1991) 457
W. Liu, D.M. Ren and B.Y. Hu, Direct determination of microstructures by IAP FIM. I. General idea and scheme 246 (1991) 462
D.M. Ren, W. Liu and B.Y. Hu, Direct determination of microstructures by IAP FIM. II. W bcc lattice determined by a manual method 246 (1991) 465

Gallium

R. Levi-Setti, P. Hallégot, C. Girod, J.M. Chabala, J. Li, A. Sodonis and W. Wolbach, Critical issues in the application of a gallium probe to high resolution secondary ion imaging 246 (1991) 94

Gallium arsenide

R.Z. Bakhtizin and S.S. Ghots, Determination of activation energies using field emission fluctuations from semiconductors 246 (1991) 60
Q.-H. Hu, A. Kvist and H.-O. Andrén, Atom probe analysis of the silver/gallium arsenide contact 246 (1991) 195

Glass

M.S. Mousa, Effect of an internally conductive coating on the electron emission from glass tips 246 (1991) 79

Grain boundary

K. Stiller, Investigations of grain boundary microchemistry in nickel base superalloys 246 (1991) 225

Hydrogen

R.M. Wolf, J.W. Bakker and B.E. Nieuwenhuys, Dissociation of nitric oxide and reaction with hydrogen on Rh(111) and various stepped Rh(111) surfaces 246 (1991) 135
W. Drachsel and J.H. Block, Isotopic effects in field desorption of hydrogen from tungsten 246 (1991) 141
J. Dirks, W. Drachsel and J.H. Block, Time-correlated ion formation in the field desorption of hydrogen 246 (1991) 150

Inorganic compounds

K.F. Russell, E.A. Kenik and M.K. Miller, Characterization of the Tishomingo meteorite 246 (1991) 292

Ion bombardment

R.Z. Bakhtizin and S.S. Ghots, Determination of activation energies using field emission fluctuations from semiconductors 246 (1991) 60

Iridium

T.T. Tsong and C.-L. Chen, Diffusion of Ir-dimers on Ir(110) surfaces by atomic-exchange and atomic-hopping mechanisms 246 (1991) 13

R.S. Chambers, Determination of cluster spacings in the FIM: iridium dimers on W(110) 246 (1991) 25

Iron

J. Liu, C.-W. Wu and T.T. Tsong, Measurement of the atomic site specific binding energy of surface atoms of metals and alloys 246 (1991) 157

Molybdenum

Q.J. Gao, A study of alloying on metal planes 246 (1991) 50

O. Nishikawa, H. Koyama and M. Tomitori, Work function, field emitted electron energy spectrum and surface composition of silicon covered molybdenum 246 (1991) 201

Nickel

J. Liu, C.-W. Wu and T.T. Tsong, Measurement of the atomic site specific binding energy of surface atoms of metals and alloys 246 (1991) 157

Nitric oxide

J.H. Block, H.J. Kreuzer and L.C. Wang, Electrostatic field effects in surface reactivity: adsorption, dissociation and catalytic reaction of nitric oxide 246 (1991) 125

R.M. Wolf, J.W. Bakker and B.E. Nieuwenhuys, Dissociation of nitric oxide and reaction with hydrogen on Rh(111) and various stepped Rh(111) surfaces 246 (1991) 135

Nitrogen

F. Okuyama, H. Hayashi and H. Iwai, Diagnosis of radio-frequency silane and silane–nitrogen plasmas based on field ionization mass spectrometry 246 (1991) 408

Oxygen

Yun-Ming Gong and Hai-Shan Zeng, Adsorption and desorption of oxygen on the W(100) plane 246 (1991) 169

Platinum

G.L. Kellogg, Temperature dependence of surface self-diffusion on Pt(001) 246 (1991) 31

J.H. Block, H.J. Kreuzer and L.C. Wang, Electrostatic field effects in surface reactivity: adsorption, dissociation and catalytic reaction of nitric oxide 246 (1991) 125

J. Liu, C.-W. Wu and T.T. Tsong, Measurement of the atomic site specific binding energy of surface atoms of metals and alloys 246 (1991) 157

Rhodium

Q.J. Gao, A study of alloying on metal planes 246 (1991) 50

R.M. Wolf, J.W. Bakker and B.E. Nieuwenhuys, Dissociation of nitric oxide and reaction with hydrogen on Rh(111) and various stepped Rh(111) surfaces 246 (1991) 135

J. Liu, C.-W. Wu and T.T. Tsong, Measurement of the atomic site specific binding energy of surface atoms of metals and alloys 246 (1991) 157

R.M. Wolf, J.W. Bakker and B.E. Nieuwenhuys, Design and performance of a scanning probe-hole field emission microscope 246 (1991) 420

Secondary ion mass spectroscopy

R. Levi-Setti, P. Hallégot, C. Girod, J.M. Chabala, J. Li, A. Sodonis and W. Wolbach, Critical issues in the application of a gallium probe to high resolution secondary ion imaging 246 (1991) 94

K. Stiller, Investigations of grain boundary microchemistry in nickel base superalloys 246 (1991) 225

Silane

F. Okuyama, H. Hayashi and H. Iwai, Diagnosis of radio-frequency silane and silane–nitrogen plasmas based on field ionization mass spectrometry 246 (1991) 408

Silicon

T. Hashizume, Y. Hasegawa, I. Sumita and T. Sakurai, FI-STM study of alkali metal adsorption on Si surfaces 246 (1991) 189

O. Nishikawa, H. Koyama and M. Tomitori, Work function, field emitted electron energy spectrum and surface composition of silicon covered molybdenum 246 (1991) 201

F. Okuyama, H. Hayashi and H. Iwai, Diagnosis of radio-frequency silane and silane–nitrogen plasmas based on field ionization mass spectrometry 246 (1991) 408

Silicon nitride

F. Okuyama, H. Hayashi and H. Iwai, Diagnosis of radio-frequency silane and silane–nitrogen plasmas based on field ionization mass spectrometry 246 (1991) 408

Silver

Q.-H. Hu, A. Kvist and H.-O. Andrén, Atom probe analysis of the silver/gallium arsenide contact 246 (1991) 195

Solid – electrolyte interface

Y.C. Wu, H.W. Pickering, D.S. Gregory, S. Geh and T. Sakurai, Real time scanning tunneling microscopy of anodic dissolution of copper 246 (1991) 468

Steel

G.B. Olson, T.J. Kinkus and J.S. Montgomery, APFIM study of multicomponent M_2C carbide precipitation in AF1410 steel 246 (1991) 238

H.-O. Andrén, S. Karagöz, C. Guangjun, L. Lundin and H. Fischmeister, Carbide precipitation in chromium steels 246 (1991) 246

J.J. Swens and B.H. Kolster, σ-Phase precipitation in a duplex stainless steel: an APFIM investigation 246 (1991) 252

F. Danoix, P. Auger, A. Bostel and D. Blavette, Atom probe characterization of isotropic spinodal decompositions: spatial convolutions and related bias 246 (1991) 260

W. Sha, A. Cerezo and G.D.W. Smith, Atom probe field-ion microscopy study of ageing behaviour of a Co-free maraging steel 246 (1991) 278

J.E. Brown and G.D.W. Smith, Atom probe studies of spinodal processes in duplex stainless steels and single- and dual-phase Fe–Cr–Ni alloys 246 (1991) 285

Superconductivity

R. Levi-Setti, P. Hallégot, C. Girod, J.M. Chabala, J. Li, A. Sodonis and W. Wolbach, Critical issues in the application of a gallium probe to high resolution secondary ion imaging 246 (1991) 94

A.J. Melmed, P.P. Camus, N. Ernst, W.A. Schmidt, G. Bozdech and M. Naschitzki, A diffusion phenomenon in Y–Ba–Cu–O superconductors 246 (1991) 173

D.M. Ren, W. Liu, B.Y. Hu, G.E. Zhou and J.H. Qin, A FIM investigation of high temperature superconducting $Bi_2(Sr, Ca)_3Cu_2O_y$ 246 (1991) 177

N. Ernst, W.A. Schmidt, G. Bozdech, M. Naschitzki and A.J. Melmed, Electronic properties of high-T_c superconductors below and above the Fermi energy 246 (1991) 183

Surface diffusion

G. Ehrlich, Direct observations of the surface diffusion of atoms and clusters 246 (1991) 1

T.T. Tsong and C.-L. Chen, Diffusion of Ir-dimers on Ir(110) surfaces by atomic-exchange and atomic-hopping mechanisms 246 (1991) 13

R.S. Chambers, Determination of cluster spacings in the FIM: iridium dimers on W(110) 246 (1991) 25

G.L. Kellogg, Temperature dependence of surface self-diffusion on Pt(001) 246 (1991) 31

M.F. Lovisa and G. Ehrlich, Quantitative determinations of the temperature dependence of diffusion phenomena in the FIM 246 (1991) 43

T. Biernat, Ch. Kleint and R. Męclewski, Field emission current fluctuations due to lithium adsorbed on the W(111) region 246 (1991) 54

Surface structure

M.S. Chung, P.H. Cutler, J. He and N.M. Miskovsky, A first-order electrohydrodynamic treatment of the shape and instability of liquid metal ion sources 246 (1991) 118

Surface thermodynamics

F. Danoix, P. Auger, A. Bostel and D. Blavette, Atom probe characterization of isotropic spinodal decompositions: spatial convolutions and related bias 246 (1991) 260
J.E. Brown and G.D.W. Smith, Atom probe studies of spinodal processes in duplex stainless steels and single- and dual-phase Fe–Cr–Ni alloys 246 (1991) 285
M.K. Miller and K.F. Russell, In-situ phase transformation in the field ion microscope 246 (1991) 299
M.G. Hetherington, J.M. Hyde, M.K. Miller and G.D.W. Smith, Measurement of the amplitude of a spinodal 246 (1991) 304
T. Abe, Statistical thermodynamics study of the concentration fluctuations above the critical temperature 246 (1991) 315

Tungsten

R.S. Chambers, Determination of cluster spacings in the FIM: iridium dimers on W(110) 246 (1991) 25
T. Biernat, Ch. Kleint and R. Męclewski, Field emission current fluctuations due to lithium adsorbed on the W(111) region 246 (1991) 54
T. Inoue and M. Nakada, A novel zirconiating technique for high brightness Zr/W emitter 246 (1991) 87
W. Drachsel and J.H. Block, Isotopic effects in field desorption of hydrogen from tungsten 246 (1991) 141
J. Dirks, W. Drachsel and J.H. Block, Time-correlated ion formation in the field desorption of hydrogen 246 (1991) 150
Yun-Ming Gong and Hai-Shan Zeng, Adsorption and desorption of oxygen on the W(100) plane 246 (1991) 169
Q.J. Gao, Z.X. Zhang, M. Lu, Y. Wang, P. Wang, Z.Y. Huang, Z.D. Lin, F.Q. Zhang, W.J. Zhang, Y.F. Zhang, G.H. Chen and X.L. Jiang, Direct observation of atomic images of ultrathin diamond and diamond-like films 246 (1991) 205
V.E. Ptitsin, Instability of thermal field electron emission 246 (1991) 373
P.P. Camus and A.J. Melmed, Performance of a reflectron energy compensating mirror 246 (1991) 415
D.M. Ren, W. Liu and B.Y. Hu, Direct determination of microstructures by IAP FIM. II. W bcc lattice determined by a manual method 246 (1991) 465

Tunneling

T. Hashizume, Y. Hasegawa, I. Sumita and T. Sakurai, FI-STM study of alkali metal adsorption on Si surfaces 246 (1991) 189
Y.C. Wu, H.W. Pickering, D.S. Gregory, S. Geh and T. Sakurai, Real time scanning tunneling microscopy of anodic dissolution of copper 246 (1991) 468

Water

J.A. Panitz and A. Stintz, Imaging atom-probe analysis of a vitreous ice interface 246 (1991) 163

Work function

Yun-Ming Gong and Hai-Shan Zeng, Adsorption and desorption of oxygen on the W(100) plane 246 (1991) 169
O. Nishikawa, H. Koyama and M. Tomitori, Work function, field emitted electron energy spectrum and surface composition of silicon covered molybdenum 246 (1991) 201
R.M. Wolf, J.W. Bakker and B.E. Nieuwenhuys, Design and performance of a scanning probe-hole field emission microscope 246 (1991) 420

Zirconium

T. Inoue and M. Nakada, A novel zirconiating technique for high brightness Zr/W emitter 246 (1991) 87